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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,572	12/22/2000	Po-Hua Fang	YUSO-104	1591

7590  
Raymond Sun  
12420 Woodhall Way  
Tustin, CA 92782

07/01/2004

EXAMINER

LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/746,572

Applicant(s)

FANG, PO-HUA

Examiner

Cheukfan Lee

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,9 and 18 is/are rejected.
- 7) ☒ Claim(s) 1-7,10-17 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-19 are pending. Claims 1 and 11 are independent.

2. The abstract is objected to because of improper use of the terminology "said".

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because of the following informalities:

Page 1, line 22, "Charged Couple Device" should read – Charge-Coupled Device --, a standard term in the art; and

Page 5, line 18, "is drove" should read – is driven --.

Appropriate correction is required. **Applicant should also check for the above kinds of mirror errors and other grammatical errors throughout the specification.**

4. Claims 1-19 are objected to because of the following:

In claim 1, line 2 of the claim, "which can" should be changed to – which moves – or – movable – to be definite that the device actually moves and not just can move;

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lines 4 and 5 of the claim, "an actuating wheel" and "a annular" should read – an actuating wheel – and – an annular --, respectively;

line 4, "consists of" should read – consisting of --;

line 5, "are set" should read – being set --;

line 6, "scan path" should read – the scan path --;

lines 5 and 6, "is" (two occurrences, respectively) should read – being --;

lines 7 and 10, "image pick-up device" should read – the image pick-up device --;

lines 9-10 and 12-13, "the first rotational speed" and "the second rotational speed", respectively, lack antecedent bases; "the" should be changed to – a --;

line 10, "actuating wheel" should read – the actuating wheel --;

line 11, "path, and" should read – path; and --; and

line 15, "drove" should read – driven --.

In claim 4, line 2 of the claim, "scan path" should – the scan path --; and

lines 2-3, "they are guide bar and guide rail which parallel to each other" should read – there are a guide bard and a guide rail which are parallel to each other --.

line 3, "image pick-up device" should read – the image pick-up device --.

line 4, "and cooperate with guide bar and guide rail" should read – that cooperate with the guide bar and the guide rail --.

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In claims 5 and 6, "delivery device" should read – the delivery device --.

In claim 6, "gears; the" should read – gears, and the --.

In claim 7, line 2, "delivery device" should read – the delivery device --;

line 3, "reduction gear set" should read – a reduction gear set – or – two reduction gear sets --, depending on Applicant's intension, since lines 4-5 of the claim recites "two reduction gear sets"; and

lines 3-4, "the first, second motor" should read – the first and second motors --;

In claim 8, line 2, "the output ends" should read – each of the output ends --;

line 3, "two motors respectively," should read – two motors, respectively, --;

lines 3-4, "actuating wheel" should read – the actuating wheel --;

In claim 10, lines 2-3, "further comprising a controller is" should read -- comprises

In claim 11, line 2 of the claim, "which can move" should read – which moves – or – is movable --;

line 4, "consists of" should read – consisting of --;

lines 4 and 5, "a actuating" and "a annular" should read – an actuating – and – an annular --, respectively;

line 5, "scan path" should read – the scan path --;

lines 7-8, "image pick-up device" should read – the image pick-up device --;

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lines 9-10 and 13-14, “the first rotational speed” and “the second rotational speed”, respectively, lack antecedent bases; “the” should be changed to – a -;

line 10, “actuating wheel” should read – the actuating wheel --;

line 11, “image pick-up device” should read – the image pick-up device --;

lines 11-12, “path, and” should read – path; and --;

line 14, “actuating wheel” should read – the actuating wheel --;

line 14, “image pick-up device” should read – the image pick-up device --; and

line 17, “is drove” should read – is driven --.

**Claims 14-19 are objected to for the same reasons as given for claims 4-8 and 10, respectively, for claims 14-19 recite the limitations that are the same or similar to those of claims 4-8 and 9, respectively.**

Claims 2, 9 and 12 are objected to as being dependent upon an objected base claim.

5. Claims 8, 9 and 18 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

In claims 8 and 18, line 3, it is unclear which motor is “the above-mentioned motor” referring to since there are two above-mentioned motors, not one.

In claim 9, languages relating to “a reduction gear set” and “the first motor and reduction gear set” are confusing. Further, it is unclear what “the first motor and

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reduction gear set” is referring to. There is no basis set forth for such a set containing a/the first motor and a reduction gear.

6. Claims 1 and 11 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

7. Claims 2-7, 10, 12-17, and 19 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. Claims 8, 9 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is an examiner’s statement of reasons for allowance:

Claims 1 and 11 and their dependent claims 2-10 and 12-19 are allowable over the prior art of record because the prior art does not teach a scanner drive mechanism having a first motor and a second motor having a first rotational speed and a second rotational speed, respectively, and each for promoting an image pick-up device of the scanner to scan back and forth in the scan path, wherein the delivery device consisting of the actuating wheel, the passive wheel and the annular conveyor belt is driven by one

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of the two motors and at the same time the other motor is controlled in the idle running state as claimed in independent claims 1 and 11.

Note that Fang (U.S. Patent No. 6,525,503) cited below does not have an effective filing date earlier than the priority date of the present invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fang (U.S. Patent No. 6,525,503) discloses a drive mechanism of a scanner, having two motors (34 and 35).

Kusumoto et al. (U.S. Patent No. 5,251,039) discloses a system for reciprocating optical units of different speeds in opposite directions by use of two motor, one for driving the optical scanning units in actual scanning and the other for driving the units in a return path of the units after actual scanning.

Yoshitake (Japanese Patent No. 03-282530) discloses an optical scanner driving system having a stepping motor for forward movement of the scanning device and a DC motor for backward movement of the scanning device.



Lee (U.S. Patent No. 6,244,124) discloses a scanner gear assembly with variable speed ratio, having two motors.

Yamauchi (U.S. Patent No. 6,392,377) discloses a motor control apparatus and a motor control method.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (703) 305-4867. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
June 15, 2004

A handwritten signature in black ink, appearing to read 'Cheukfan Lee', is written over a printed version of the same name.